

EXERCISE RED FLAG

Exercise Red Flag is a premier multinational air combat training exercise hosted by the United States Air Force (USAF) at Nellis Air Force Base in Nevada. It is designed to provide realistic aerial combat scenarios for air forces from around the world, enhancing their interoperability, readiness, and combat effectiveness. Here's an overview of Exercise Red Flag 2024:

Exercise Red Flag 2024 aims to simulate complex combat environments where participating air forces can train together in realistic scenarios. It involves a wide range of participants, including fighter, bomber, reconnaissance, electronic warfare, and aerial refueling aircraft. The exercise typically includes aircraft from the USAF, US Navy, US Marine Corps, as well as international partners and allies. During Exercise Red Flag, participating aircraft engage in simulated combat operations against aggressor squadrons. These aggressors replicate enemy tactics and provide a challenging environment that forces participants to adapt and refine their tactics, techniques, and procedures (TTPs). The scenarios cover a variety of missions, including air interdiction, close air support, defensive counter-air, and suppression of enemy air defenses. One of the primary goals of Exercise Red Flag is to enhance interoperability among participating air forces. Pilots and aircrew practice joint tactics and procedures, communication protocols, and logistics support, fostering better coordination in multinational operations.

Sunita Williams achievement in space exploration

■ **MOHAMMAD HANIEF**

In a historic achievement, Indian-American astronaut Sunita Williams has become the first woman to pilot a new spacecraft on its inaugural crewed test flight to space. Williams, 58, launched aboard Boeing's Starliner capsule on June 5 this year, alongside NASA astronaut Barry "Butch" Wilmore, from Cape Canaveral, Florida.

The mission, dubbed Boeing Crew Flight Test (CFT), is a crucial step in certifying the starliner for regular crewed flights to the International Space Station (ISS) as part of NASA's Commercial Crew Program. If successful, it will make starliner the second private spacecraft after SpaceX's Crew Dragon to transport astronauts to and from the orbiting laboratory.

For Williams, a veteran of two previous space shuttle missions totaling 322 days in orbit, this flight marks another pioneering milestone in her trailblazing career: She previously set records for most spacewalks (7) and spacewalk time (50 hours, 40 minutes) by a woman during her expeditions aboard the ISS in 2006-2007 and 2012.

The Starliner capsule will attempt to dock with the ISS around 26 hours after liftoff, carrying Williams, Wilmore and over 500 pounds of cargo for the orbiting outpost. The two astronauts are scheduled to spend about a week aboard the station, conducting tests and validating Starliner's systems before returning to Earth for a parachute-assisted landing in the western United States.

Williams' achievement is particularly poignant given her Indian-Slovenian heritage. Born to an Indian-American father from Gujarat and a Slovenian-American mother, she has celebrated her multicultural roots by carrying Indian and Slovenian items during her previous spaceflights.

As Williams and Wilmore continue operations aboard the ISS, their pioneering mission aboard Starliner marks a significant step in expanding humanity's access to space through commercial partnerships. It also cements Williams' legacy as one of the most accomplished women in the history of space exploration.

Researchers from the Indian Institute of Technology-Madras and NASA's Jet Propulsion Laboratory (JPL) are collaborating on a study of a 'superbug', a multidrug-resistant pathogen, discovered on the International Space Station (ISS). This finding has raised 'health concerns' for astronauts, with Sunita Williams currently on board the ISS. The research on this pathogen could also have significant applications on Earth.

Enterobacter bugandensis, a common nosocomial pathogen, has been detected on surfaces within the ISS. "In a new scientific paper funded by an Ames Space Biology grant, Principal Investigator Dr. Kasthuri Venkateswaran of NASA's Jet Propulsion Laboratory strains of the bacterial species Enterobacter bugandensis isolated from the International Space Station (ISS) were studied," NASA said in its release on April 16 this year.

Astronauts face unique health challenges in space due to their altered immune conditions and limited access to medical facilities. The researchers said comprehending the microbial landscape aboard the ISS is crucial to evaluating its impact on astronaut well-being.

Indian-origin Sunita Williams, 58, embarked on her third space journey on Thursday, June 6, alongside Wilmore, aged 61. This historic event marked the first voyage aboard Boeing's Starliner spacecraft to the International Space Station (ISS). Williams serves as the pilot for the flight test, while Wilmore assumes the mission commander role. Astronauts face unique health challenges in space due to their altered immune conditions and limited access to medical facilities. The researchers said comprehending the microbial landscape aboard the ISS is crucial to evaluating its impact on astronaut well-being. Another study cited by NASA regarding E. bugandensis highlighted the significance of the International Space Station (ISS) as a symbol of human achievement in space exploration.

Despite the space station's controlled environment characterised by microgravity, heightened Carbon dioxide levels, and increased solar radiation, microorganisms thrive in a distinctive niche.

These microbial residents play a vital role in impacting the health and welfare of astronauts aboard. Enterobacter bugandensis, commonly found in clinical samples such as the human gastrointestinal tract, is reported to possess pathogenic characteristics, potentially causing various infections. In 2014, both Boeing and SpaceX received funding from NASA's Commercial Crew programme to carry astronauts to the ISS after the US space agency retired its Space Shuttle Program in 2011. Boeing received over USD 4 billion in US federal funds to develop the Starliner, while SpaceX received about USD 2.6 billion. Since its first launch on May 30, 2020, SpaceX's Crew Dragon has performed 12 crewed missions to the ISS. Before June 05 launch, the last attempt to launch Boeing's Starliner spacecraft was scrubbed on Saturday, less than four minutes before blastoff from the Kennedy Space Centre, due to a ground system computer triggering an automatic abort command that shut down the launch sequence. On May 6, NASA, Boeing, and ULA "scrubbed" the launch due to a "suspect oxygen relief valve on the Atlas V rocket's Centaur second stage."Sunita, from Needham, Massachusetts, earned a physical science degree from the US Naval Academy and a master's in engineering management from the Florida Institute of Technology. Her first spaceflight was Expedition 14/15 (from December 2006 to June 2007), launching on space shuttle Discovery's STS-116 mission to reach the International Space Station, according to NASA. While onboard, Sunita established a world record for women at the time with four spacewalks. She concluded her tour of duty by returning to Earth with shuttle Atlantis' STS-117 flight, landing at Edwards Air Force Base in California on June 22, 2007.

Selected as an astronaut by NASA in June 1998, Sunita has spent a total of 322 days in space on two missions and accumulated 50 hours and 40 minutes of cumulative EVA time on seven spacewalks. She worked with Roscosmos on its contribution to the space station and with the first Expedition crew. Meanwhile, 61-year-old Barry Wilmore has logged 178 days in space and has spent 25 hours and 36 minutes on four spacewalks.

NASA has announced that astronaut Sunita Williams will return to Earth from the International Space Station on June 22. She arrived at the ISS on June 5, her fourth visit to space, with Butch Wilmore aboard the Boeing-designed Starliner spacecraft. The journey back to Earth is expected to take around 6 hours, with potential landing sites in Utah, New Mexico, or backup locations.

■ OMKAR DATTATRAY

It is very disturbing and sad that the prestigious NEET examination is under thick cloud as there are serious allegations of question paper leak coupled with other allegations of irregularities against NEET. This has resulted in the erosion of the image and standing of NEET-UG among the students and the general public. There is need to restore the lost credibility of this premier institution of National Testing Agency which is empowered to conduct the NEET-UG examination .The aspiring candidates and the public spirited people have leveled serious allegations of question paper scam and other irregularities against NEET examination and NTA. There is rightly some hanky pinky in the conduct of the NEET examination .A large number of more than 24 lakh candidates have written the examination on 5th of May in the centers all over the country and the results of NEET were declared on 4th June proponed by 10 days and surely there have been some underhand means applied in the NEET examination and in the declaration of its result and in the making and preparation of the result. The fact that the result of the NEET examination 2024 was declared 10 days before the day of declaration of the result already fixed. It definitely points to something fishy in the matter .It is very piquant that this time 67 students were said to have scored 100 percent marks and to be specific 67 students got 720 marks out of 720 and these 67 candidates were declared to have got first all India ranking and this is very surprising. As against more than 24 lakh candidates who wrote the NEET-UG examination, there are only one lakh vacancies of doctors across the country. Since the matter is directly related with the future of 24 lakh candidates and indirectly associated with crores of the people, there is utmost need to investigate the allegations leveled against NEET examination as well as against the NTA at the earliest, so that the image of NEET and NTA is maintained .There is need and demand for re-examination of NEET in order to give justice to lakhs of the candidates who have toiled a lot and have burned mid night oil to pass the NEET examination in order to successful and pursue the medical courses and serve the ailing humanity

NEET paper scam and other irregularities

.There are allegations that money has also changed hands and a good number of candidates have paid bribes to the officials of NTA in lakhs to get question papers of NEET -UG exam in advance and it needs a through probe to unearth the truth. There are strong protests going on in various parts of the country and Delhi as well to draw the attention of the government towards the paper leak scam and other irregularities in the conduct of NEET and the matter has also pending in high courts and Supreme Court.A number of petitions have been filed by the candidates against the irregularities in NEET. At the government level there is urgent need to investigate and probe the matter and set it right to save the careers of the lakhs of the students .The agitating candidates have met Education Minister Dharmendra Pradhan and it is learnt that the minister has told the candidates that the matter is sub-judice and the verdict of the Supreme Court should be obeyed by all concerned including the agitating students and the government .He has also told the agitating candidates that there is no evidence of any irregularity in the NEET. The silence of the previous Modi government about this scam had got rippled in the recent general elections of 2024 and this also has contributed to the poor results of the BJP in these elections. .Congress questions PM's silence over the NEET question paper scam and demands that the government should take serious cognizance of the matter since it is related with the future of the lakhs of the students .As per the marking scheme ,a candidate gets 4 marks for a correct answer and loses one mark for a wrong answer .If a question is not attempted by a candidate ,then no mark is rewarded for it.However two NEET exam candidates scored 719 and 718 marks with AIR 68 and 69 respectively. Suspiciously similar roll numbers ,sudden change in result declaration date, and allegations of paper leaks have raised eyebrows about the NEET-UG results. The NEET-UG exam which was conducted on May 5 and saw the participation of more than 24 lakh candidates ,has recently stirred a controversy after the results were declared. The results of the exam were scheduled to be released on June 14,but were instead released 10 days earlier on June 4.The key reasons as to why the NEET-UG results also had

sparked a controversy.1-67 Students scored perfect marks getting 720.2-The students scored 718,719 marks is impossible according to the NEET marking scheme.3---Numerous NEET-UG toppers are from the same examination centre.5---Allegations of NEET question papers leaks. Online registration for NEET -UG 2024 started on Feb 9,2024 and were extended till 16th March .Everything was well and good up to that point .All of a sudden ,on April 9,NTA decided to re-open the online registration for 2 days from April 9 to 10 due to 'stakeholder's requests. 'The question arises why would you re-open the registrations when you have already done it 2 times? And that too ,a whole month later.?NEET-UG exam was held on May 5 when on the same day there were allegations about the question paper being leaked .In a centre in Rajasthan ,students reported that the centre gave them the question paper with pre-marked answers than took it back .Hindi medium students received English paper.NTA clarified it immediately on the same day that exam was re-conducted for 120 students .It is also something fishy as to how and why the results of the exam were declared soon ,about 10 days in advance and also mentioned how eight students from the same examination centre in Haryana who secured AIR 62 to 69 ,had largely similar roll numbers .The unusual fact that 67 students in a row on the list secured a perfect 720 score ,but after that ,two candidates scored 719 and 718 marks with AIR 68 and 69 respectively ,which is not mathematically possible according to the marking scheme of the medical exam. The National Testing Agency -NTA responded on the matter stating that they applied a normalization formula to account for the time lost during the exam ,resulting in some candidates receiving scores of 718 or 719.About the earlier allegations of the NEET paper leak also, NTA clarified and claimed them to be completely baseless and without any ground .Asserting that every question paper has been accounted for, the NTA said that the purported images of the question paper circulated on social media have no relation to the actual paper .It said ,it has been ascertained from NTA's security protocols and Standard Operating Procedures that the social media posts pointing towards any paper

leak are completely baseless and without any ground .The NTA announced on June 8,that the Education Ministry has set up a four-member panel to review the grace marks awarded to over 1,500 candidates in the NEET-UG exam .A write petition has been filed in the Supreme Court of India requesting to re-conduct the NEET-UG 2024 exam .The Supreme Court is hearing three petitions challenging the grant of grace marks and the suspicions of paper leak. The centre informed the SC that the decision to grant grace marks to 1,563 NEET -UG 2024 candidates for admission to MBBS ,BDS ,and other courses has been rescinded .These candidates will have the opportunity to opt for a re-test scheduled for June 23.The court ,however, declined to halt the admissions counseling process .If any of the 1,536 candidates choose not to participate in the re-test ,their previous marks ,excluding the grace marks, will be considered for result purposes.NTA decided to re-conduct the NEET-UG 2024 on 23June 2024 for 1563 candidates who had experienced time loss during the originally scheduled examination on 05 May 2024.The honorable SC is ceased of the matter and it will go into the demand of NEET-UG exam re-test and it will also decide on the demand of CBI investigation into the NEET paper scam and the SC has fixed the next date of hearing the pleas seeking CBI probe ,transfer of cases from High Courts on July 8.In brief Medical entrance exam NEET-UG with over 24 lakh candidates appearing for it has become a centre of controversy over allegations of several irregularities and has triggered protests across the country and a political slugfest. The NEET-UG exam paper leak case has been politicized by the opposition parties including congress .Candidates demand that investigation in the matter of NEET-UG paper leak and scam should be done under the supervision of the Supreme Court. This case is gaining momentum and there is increase in the protests all over India and government should take cognizance of this serious matter and investigate it in a time bound manner .Now that the several petitions are pending in SC ,it is expected that justice will be given to the large number of candidates and the image of NEET-UG and NTA will be restored.

(The author is a columnist, social and KP activist)

Girl Child and Holistic Approach: Dimensions and Beyond

■ DR. RAJKUMAR SINGH

Nourishing a girl child encompasses providing her with adequate nutrition, emotional support, education, and healthcare to ensure her overall development and well-being: a. Nutritional Needs: Balanced Diet: A girl child needs a diet rich in proteins, vitamins, minerals, and essential fats. Vitamins and Minerals: It is crucial for immune function and development. Important vitamins include Vitamin A, C, D, and E, while minerals like iron, calcium, and zinc are vital. Provide energyinclude whole grains, fruits, vegetables, and healthy fats from sources like fish, nuts, and seeds.Hydration: Adequate water intake is essential for overall health.Special Considerations:Iron: Girls are at higher risk of anemia, so iron-rich foods like leafy greens, meat, and fortified cereals are important.Calcium and Vitamin D: Essential for bone health, particularly during the growth spurts of puberty. Sources include dairy products, fortified plant milks, and sunlight exposure. b. Emotional and Psychological Nourishment: Positive Environment: Creating a nurturing and supportive home environment is crucial for a girl's emotional development.Encouragement and Support: Providing encouragement, support, and positive reinforcement to build self-esteem and confidence.Mental Health: Access to mental health resources and support systems to address any psychological issues. c. Education and Intellectual Development: Access to Education: Ensuring that girls have access to quality education, which is fundamental for their intellectual growth and future opportunities.Encouragement in STEM: Encouraging participation in science, technology, engineering, and mathematics to promote diverse career opportunities.Extracurricular Activities: Participation in sports, arts, and other extracurricular activities for well-rounded development. d. Healthcare Regular Check-ups: Routine medical check-ups to monitor growth, development, and overall health. Vaccinations: Ensuring all vaccina-

tions are up-to-date to prevent diseases. Adolescent Health: Special focus on health during puberty, including menstrual hygiene management, reproductive health education, and access to gynecological care if needed. e. Protection from Harm: Safeguarding against child marriage, abuse, and exploitation. Community Programs: Engaging in community programs that support the rights and development of girls. Thus, nourishing a girl child requires a holistic approach that includes adequate nutrition, emotional and psychological support, access to education, and healthcare.

Discriminations in nourishment Discrimination in the nourishment of boys and girls manifests in various ways and has significant long-term impacts on health, education, and overall development: a. Nutritional Disparities:Food Allocation: In some cultures, boys may receive larger portions or better quality food compared to girls. This results in girls receiving less nutrition and essential nutrients, impacting their growth and health.Access to Nutrient-Rich Foods: Boys might be given priority when it comes to accessing foods rich in proteins, vitamins, and minerals, while girls might be left with less nutritious options. b. Healthcare Access:Medical Attention: Boys may receive more prompt and better medical care compared to girls, who might be neglected or taken to healthcare facilities only in severe cases.Preventive Care: Girls might have less access to preventive healthcare services, including vaccinations and regular health check-ups. c. Educational Opportunities:School Attendance: In some regions, boys are prioritized for education, while girls might be kept at home to help with household chores or due to safety concerns.Quality of Education: Even when girls attend school, they might receive less encouragement and support compared to boys, limiting their academic achievements. d. Emotional and Psychological Support:Support Systems: Boys might receive more encouragement and emotional support, fostering their self-

esteem and confidence, while girls might be discouraged from pursuing their interests and ambitions.Mental Health Resources: Girls may have less access to mental health resources and support, increasing their vulnerability to issues like depression and anxiety. d. Societal and Cultural Norms:Gender Roles: Cultural norms often dictate that boys are more valuable or capable, leading to preferential treatment. Girls might face restrictive gender roles that limit their opportunities and affect their self-worth.Child Marriage and Exploitation: In some societies, girls are more likely to face early marriage and exploitation, which disrupts their education and development.Consequences of Discrimination: a. Health Impacts:Malnutrition: Discriminatory feeding practices can lead to malnutrition in girls, resulting in stunted growth, weakened immune systems, and higher susceptibility to diseases.Anaemia and Other Deficiencies: Girls are particularly at risk of iron-deficiency anaemia due to inadequate nutrition and menstrual blood loss. b. Educational and Economic Outcomes:Lower Educational Attainment: Discrimination in education results in lower literacy rates and limited career opportunities for girls, perpetuating the cycle of poverty. Economic Dependence: Limited education and job opportunities make girls more economically dependent, reducing their ability to support themselves and their families. c. Psychological Effects: Low Self-Esteem: Constant discrimination and undervaluation can lead to low self-esteem and lack of confidence in girls. Mental Health Issues: Increased risk of mental health problems such as depression, anxiety, and stress due to societal pressures and lack of support. d. Social Consequences: Gender Inequality: Discrimination in nourishing boys and girls perpetuates gender inequality, hindering societal progress and the empowerment of women. Intergenerational Impact: The effects of discrimination can carry over to the next generation, with malnourished and uneducated women being less able to

provide adequately for their children.By addressing these areas of discrimination, societies can ensure that both boys and girls have the opportunity to reach their full potential, contributing to healthier, more equitable, and prosperous communities.

Possible remedies

While the core principles of nourishing children remain the same regardless of gender-adequate nutrition, emotional support, education, and healthcare-specific needs can vary due to physiological differences, societal expectations, and cultural factors. As we all are aware that girls often face more restrictive gender roles that can limit opportunities and affect self-esteem. Promoting gender equality and challenging stereotypes is crucial. They are more vulnerable to issues like child marriage, gender-based violence, and exploitation in many cultures. Protective measures and advocacy are essential: a.Policy and Legislation: Implementing laws and policies that promote gender equality in nutrition, healthcare, and education.Ensuring strict enforcement of laws against child marriage and gender-based violence. b. Awareness and Education: Conducting awareness campaigns to change societal attitudes and cultural norms that favour boys over girls. Educating communities about the importance of equal treatment and opportunities for boys and girls. c. Community and Family Interventions: Empowering families and communities to prioritize the health and education of girls. Providing support programs and resources to ensure girls have access to nutritious food, healthcare, and education. d. Monitoring and Evaluation: Regularly monitoring and evaluating programs to ensure they are effectively addressing discrimination and meeting the needs of both boys and girls.By addressing these areas of discrimination, societies can ensure that both boys and girls have the opportunity to reach their full potential, contributing to healthier, more equitable, and prosperous communities.

(The author is a youth motivator)

YOUR COLUMN

Will it review its attitude to Jammu?

J&K unit of BJP is holding review meetings to find what led to the sharp decline in the BJP's vote share (almost 50%) in Jammu province in the 2024 General Elections.

Strange!

Even a lay man knows that the BJP's utter failure to identify itself with the Jammu cause and preferential treatment to Kashmir responsible for the erosion of its support-base in Jammu.

Will it review its attitude to Jammu?

Any failure on its part to appreciate the ground situation/stark reality would further hurt its poll prospects in Jammu. Besides, it has to review its pro- assembly poll attitude. Will it or will it continue to live in a world of the past?

Prof Hari Om

YOGA - THE PERFECT PATH OF LIFE

Yoga is an ancient Indian art which leads to a perfect way of life. It

was originated in India from the pre Vedic Period. The word "Yoga" is derived from the Sanskrit root Yuj which means - to unite or to join and as per Yogic Scriptures yoga is a practice of unification of individual consciousness with that of Universal Consciousness. It indicates that yoga is a perfect path of Harmony of mind,body and mood with that of Nature. The then existing practices of Yogataken from the Hindu Scriptureswas simplifiedpractised and codified by the great sage Maharishi Patanjali- the father of Modern Yoga. He wrote yoga sutras to tell different theories and practices connected yoga in ancient yogic science.TirumalaiKrishnamacharya is also considered as the father of modern yogain different parts of the country.Yoga is a form of exercise which balances the essential elements of our body to keep control on our psychosomatic. Its meditation leads us to a happy, healthy andrelaxed/peaceful life.

Lord Shiva (Adiyogi / the first Yogi) is regarded as the Patron God of Yoga.Seven common types of yoga are the starting points for exploring this ancient practice of yoga. Prominent and most advanced among them is Sirsasana (The King of yoga Poses) where head is the prime part to be stabilised. Among other important asanas is the tree pose asanas too as it improves our physical balance and muscular strength. In fact,

Yoga has three basic elements to be dealt sternly for ultimate goal. These three basic elements are: Asanas, Pranayama and Concentration.

On September27, 2014, Prime minister Shri Narinder Bhai Damodar Das Modi in his UN address shares a special significance of yoga (invaluable gift of India's ancient tradition)with many parts of the world and suggested its annual day celebration worldwide on June 21 being the longest day of northern hemisphere.

On Dec 11, 2014, United Nation General Assembly declared June 21st as the International Yoga Day. Since then, it is celebrated internationally to improve physical and mental health so that one may become bodily more fit or flexible and mentally strong and relaxed. It reduces stress, anxiety, depression and improves sleep, strength and immunity. This invaluable gift of our ancestors must me promoted for fit India, Happy India and Healthy India. So, be a part of this campaign initiated by our loved Prime Minister Shri Narinder Modi Jee and strengthen our contry by strengthening individual, society and nation through the practice of Yoga - The Perfect path of Life.

Dr Jaipal Singh (Principal GDC Doongi-Rajouri)